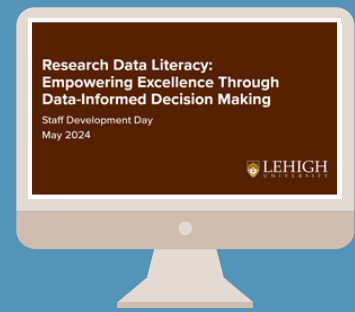


# RESEARCH DATA LITERACY:

Empowering Excellence Through Data-Informed Decision Making



*Click on the computer above to be taken to the presentation.*

## WHAT IS DATA LITERACY?

The ability to read, write & communicate data in context including understanding data sources and constructs, analytical methods and techniques, and the ability to describe the use case, application, and resulting value.

### TERMINOLOGY



#### Database

place that stores a collection of data in an organized and structured format.



#### Data Warehouse

data collected from various sources and is organized & optimized for reporting.



#### Data Lake

location to store large amounts of raw, unorganized data from various sources, for analysis/trends.



#### Institutional Data Dictionary (IDD)

Lehigh's collaborative data dictionary and data management solution that contains data definitions, data lineage, and specifications for reports and dashboards.

## EFFECTIVE VS INEFFECTIVE

Understanding various data types, formats, & sources	Where can I find data?  I don't know what data is needed.
Data manipulation and cleaning	It takes too long to manipulate and clean data!
Analytical thinking & problem solving	I don't know what the goal is.
Data visualization	How do I get from the raw data to a finished product?
Communication	Who else is looking at this same data?
Knowledge/use of software & other technical skills	How do I know what questions to ask my data?

## LOOKING TO IMPROVE YOUR DATA LITERACY?

*Check out these learning opportunities to expand your knowledge of Data Literacy.*

### LTS Seminars

### LinkedIn Learning

[Argos for Reporting: An Overview](#)

[Banner Admin & Self-Service Overview](#)

[Qualtrics Data](#)

[How to Use Data Visualization to Make Better Decisions](#)

[Data Visualization for Data Analysis and Analytics](#)

# DATA AT LEHIGH

Where it is located & how to access



SYSTEM	DESCRIPTION	ACCESS	CONTACT
<b>ARGOS</b>	A business intelligence solution for higher education institutions used to extract data, create operational dashboards, reports, and scheduled integrations.	Defined by job duties. In the request include the rationale and/or the need for the data access.	The supervisor <u><a href="#">submits a LTS support ticket</a></u> for Argos Access.
<b>AWS QUICKSIGHT</b>	We are presently in the evaluation phase of this product aimed at enhancing our reporting and analytics capabilities. This visualization engine functions similarly to Tableau but without the constraints of licensing restrictions.	Currently, on a case-by-case scenario.	The supervisor <u><a href="#">submits a LTS support ticket</a></u> for DBA.
<b>BANNER</b>	A comprehensive ERP software tailored for higher education institutions, managing administrative tasks like student information, finance, human resources, and payroll.	Defined by job duties. In the request include the rationale and/or the need for the data access.	The supervisor <u><a href="#">submits a LTS support ticket</a></u> for Banner Access/Training.
<b>INSTITUTIONAL DATA DICTIONARY (IDD)</b>	A central repository of data definitions and specifications supporting Lehigh's Data Governance initiatives overseen by the Office of Institutional Data (OID).	Automatic. All active faculty, staff, and students have access to the data dictionary.	No request required. Contact <u><a href="mailto:datagovernance@lehigh.edu">datagovernance@lehigh.edu</a></u> with specific questions.
<b>INSTITUTIONAL DATA PORTAL (IDP)</b>	An analytics platform used by the Office of Institutional Data at Lehigh to share interactive dashboards with campus stakeholders. The IDP is hosted on Tableau Server and all dashboards are built with the software tool Tableau Desktop.	Defined by job duties. Primarily used by Lehigh's senior leadership, academic departments and OID. Viewer license is required.	Contact <u><a href="mailto:data@lehigh.edu">data@lehigh.edu</a></u> with questions.
<b>LIRA</b>	The Lehigh Integrated Research Administration (LIRA) Suite streamlines processes for project proposals, agreements, awards, and modifications.	All active faculty/staff are able to log into LIRA, but additional roles need to be added to work with proposals and awards within LIRA.	The user <u><a href="#">submits a LIRA support ticket</a></u> for ORSP.